



## **Exhibit A**

<210> 93  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<400> 93  
 Met Gly Val Ala Leu Pro Ser: Pro Leu Leu Cys Ser Leu Pro Leu Phe  
 1 5 10 15  
 Leu Leu Phe Gly Asp Val Ser: Gly Ser Ser Ser Leu Leu Ala Leu Leu  
 20 25 30  
 Pro Phe Leu His Pro Trp His: His Pro Ser Leu Ser  
 35 40

<210> 94  
 <211> 403  
 <212> PRT  
 <213> Homo sapiens

<400> 94  
 Met Ala Thr Ala Glu Arg Arg: Ala Leu Gly Ile Gly Phe Gln Trp Leu  
 1 5 10 15  
 Ser Leu Ala Thr Leu Val Leu: Ile Cys Ala Gly Gln Gly Gly Arg Arg  
 20 25 30  
 Glu Asp Gly Gly Pro Ala Cys: Tyr Gly Gly Phe Asp Leu Tyr Phe Ile  
 35 40 45  
 Leu Asp Lys Ser Gly Ser Val: Leu His His Trp Asn Glu Ile Tyr Tyr  
 50 55 60  
 Phe Val Glu Gln Leu Ala His: Lys Phe Ile Ser Pro Gln Leu Arg Met  
 65 70 75 80  
 Ser Phe Ile Val Phe Ser Thr: Arg Gly Thr Thr Leu Met Lys Leu Thr  
 85 90 95  
 Glu Asp Arg Glu Gln Ile Arg: Gln Gly Leu Glu Glu Leu Gln Lys Val  
 100 105 110  
 Leu Pro Gly Gly Asp Thr Tyr: Met His Glu Gly Phe Glu Arg Ala Ser  
 115 120 125  
 Glu Gln Ile Tyr Tyr Glu Asn: Arg Gln Gly Tyr Arg Thr Ala Ser Val  
 130 135 140  
 Ile Ile Ala Leu Thr Asp Gly: Glu Leu His Glu Asp Leu Phe Phe Tyr  
 145 150 155 160  
 Ser Glu Arg Glu Ala Asn Arg: Ser Arg Asp Leu Gly Ala Ile Val Tyr  
 165 170 175  
 Cys Val Gly Val Lys Asp Phe: Asn Glu Thr Gln Leu Ala Arg Ile Ala

180							185					190				
Asp	Ser	Lys	Asp	His	Val	Phe	Pro	Val	Asn	Asp	Gly	Phe	Gln	Ala	Leu	
		195					200					205				
Gln	Gly	Ile	Ile	His	Ser	Ile	Leu	Lys	Lys	Ser	Cys	Ile	Glu	Ile	Leu	
		210				215					220					
Ala	Ala	Glu	Pro	Ser	Thr	Ile	Cys	Ala	Gly	Glu	Ser	Phe	Gln	Val	Val	
225					230					235					240	
Val	Arg	Gly	Asn	Gly	Phe	Arg	His	Ala	Arg	Asn	Val	Asp	Arg	Val	Leu	
				245					250					255		
Cys	Ser	Phe	Lys	Ile	Asn	Asp	Ser	Val	Thr	Leu	Asn	Glu	Lys	Pro	Phe	
			260				265					270				
Ser	Val	Glu	Asp	Thr	Tyr	Leu	Leu	Cys	Pro	Ala	Pro	Ile	Leu	Lys	Glu	
		275				280						285				
Val	Gly	Met	Lys	Ala	Ala	Leu	Gln	Val	Ser	Met	Asn	Asp	Gly	Leu	Ser	
		290				295					300					
Phe	Ile	Ser	Ser	Ser	Val	Ile	Ile	Thr	Thr	Thr	His	Cys	Ser	Asp	Gly	
305					310					315					320	
Ser	Ile	Leu	Ala	Ile	Ala	Leu	Leu	Ile	Leu	Phe	Leu	Leu	Leu	Ala	Leu	
				325					330					335		
Ala	Leu	Leu	Trp	Trp	Phe	Trp	Pro	Leu	Cys	Cys	Thr	Val	Ile	Ile	Lys	
			340				345					350				
Glu	Val	Pro	Pro	Pro	Pro	Ala	Glu	Glu	Ser	Glu	Val	Ser	Asp	His	Ser	
		355				360						365				
Arg	Met	Ala	Val	Gly	Gly	Gln	Gly	Gly	Arg	Val	Gly	Trp	Arg	Ala	Gly	
		370				375					380					
Trp	Ala	Ala	Gly	His	Leu	Ala	Pro	Cys	Arg	Ala	Glu	Leu	Ser	Gln	Ala	
385					390					395					400	
Gln	Arg	Ile														

<210> 95

<211> 870

&lt;212&gt; PRT

<213> Homo sapiens

<400> 95

Met Gly Pro Pro Ser Leu Vall Leu Cys Leu Leu Ser Ala Thr Val Phe  
1 5 10 15

Ser Leu Leu Gly Gly Ser Serr Ala Phe Leu Ser His His Arg Leu Lys  
20 25 30

Gly Arg Phe Gln Arg Asp Arg Arg Asn Ile Arg Pro Asn Ile Ile Leu

Pro Phe Leu His Pro Trp His His Pro Ser Leu Ser  
                   35                                  40

<210> 124

<211> 86

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the: naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the: naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the: naturally occurring L-amino acids

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the: naturally occurring L-amino acids

<400> 124

Leu Gly Ser Pro Glu Xaa Ala Gln Lys Val Asp Ile Thr Ser Ala His  
   1                                  5                                  10                                  15

Phe Ile Gly Gln Xaa Ser Arg Pro Ser Asp Phe Ala Gln Val Xaa Ser  
                   20                                  25                                  30

Leu Glu Gly Ser Arg Pro Val Ile Trp Ser Leu Asn Gly Trp Thr Leu  
                   35                                  40                                  45

Lys Glu Thr Pro Arg Ala Asp Gly Val Phe Thr Glu Thr Ala Gly Gln  
                   50                                  55                                  60

Gly Leu Gly Thr Ala Gln Gly His Leu Leu Trp Xaa Ala Ala Ala Thr  
   65                                  70                                  75                                  80

Gly Ser Pro Asp Cys Ser  
                                   85

<210> 125

<211> 403

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (175)

<223> Xaa equals any of the: naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (320)

&lt;223&gt; Xaa equals any of the: naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (331)

&lt;223&gt; Xaa equals any of the: naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (368)

&lt;223&gt; Xaa equals any of the: naturally occurring L-amino acids

&lt;400&gt; 125

Met	Ala	Thr	Ala	Glu	Arg	Arg	Ala	Leu	Gly	Ile	Gly	Phe	Gln	Trp	Leu
1				5					10					15	

Ser	Leu	Ala	Thr	Leu	Val	Leu	Ile	Cys	Ala	Gly	Gln	Gly	Gly	Arg	Arg
			20					25						30	

Glu	Asp	Gly	Gly	Pro	Ala	Cys	Tyr	Gly	Gly	Phe	Asp	Leu	Tyr	Phe	Ile
		35					40					45			

Leu	Asp	Lys	Ser	Gly	Ser	Val	Leu	His	His	Trp	Asn	Glu	Ile	Tyr	Tyr
	50					55					60				

Phe	Val	Glu	Gln	Leu	Ala	His	Lys	Phe	Ile	Ser	Pro	Gln	Leu	Arg	Met
65					70					75					80

Ser	Phe	Ile	Val	Phe	Ser	Thr	Arg	Gly	Thr	Thr	Leu	Met	Lys	Leu	Thr
			85						90					95	

Glu	Asp	Arg	Glu	Gln	Ile	Arg	Gln	Gly	Leu	Glu	Glu	Leu	Gln	Lys	Val
			100					105					110		

Leu	Pro	Gly	Gly	Asp	Thr	Tyr	Met	His	Glu	Gly	Phe	Glu	Arg	Ala	Ser
		115					120					125			

Glu	Gln	Ile	Tyr	Tyr	Glu	Asn	Arg	Gln	Gly	Tyr	Arg	Thr	Ala	Ser	Val
	130					135				140					

Ile	Ile	Ala	Leu	Thr	Asp	Gly	Glu	Leu	His	Glu	Asp	Leu	Phe	Phe	Tyr
145					150					155					160

Ser	Glu	Arg	Glu	Ala	Asn	Arg	Ser	Arg	Asp	Leu	Gly	Ala	Ile	Xaa	Tyr
			165					170						175	

Cys	Val	Gly	Val	Lys	Asp	Phe	Asn	Glu	Thr	Gln	Leu	Ala	Arg	Ile	Ala
			180					185					190		

Asp	Ser	Lys	Asp	His	Val	Phe	Pro	Val	Asn	Asp	Gly	Phe	Gln	Ala	Leu
		195					200					205			

Gln	Gly	Ile	Ile	His	Ser	Ile	Leu	Lys	Lys	Ser	Cys	Ile	Glu	Ile	Leu
	210					215					220				

Ala Ala Glu Pro Ser Thr Ile; Cys Ala Gly Glu Ser Phe Gln Val Val  
 225 230 235 240  
 Val Arg Gly Asn Gly Phe Arg; His Ala Arg Asn Val Asp Arg Val Leu  
 245 250 255  
 Cys Ser Phe Lys Ile Asn Asp; Ser Val Thr Leu Asn Glu Lys Pro Phe  
 260 265 270  
 Ser Val Glu Asp Thr Tyr Leu; Leu Cys Pro Ala Pro Ile Leu Lys Glu  
 275 280 285  
 Val Gly Met Lys Ala Ala Leu; Gln Val Ser Met Asn Asp Gly Leu Ser  
 290 295; 300  
 Phe Ile Ser Ser Ser Val Ile; Ile Thr Thr Thr His Cys Ser Asp Xaa  
 305 310 315 320  
 Ser Ile Leu Ala Ile Ala Leu; Leu Ile Leu Xaa Leu Leu Leu Ala Leu  
 325 330 335  
 Ala Leu Leu Trp Trp Phe Trp; Pro Leu Cys Cys Thr Val Ile Ile Lys  
 340 345 350  
 Glu Val Pro Pro Pro Pro Ala; Glu Glu Ser Glu Val Ser Asp His Xaa  
 355 360 365  
 Arg Met Ala Val Gly Gly Gln; Gly Gly Arg Val Gly Trp Arg Ala Gly  
 370 375; 380  
 Trp Ala Ala Gly His Leu Ala; Pro Cys Arg Ala Glu Leu Ser Gln Ala  
 385 390 395 400  
 Gln Arg Ile

&lt;210&gt; 126

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 126

Ser Ala Ser Cys Trp Asn Ala; Asn Phe Leu Pro Arg Asn Gln Gly Arg  
 1 5 10 15  
 Lys Leu His Cys Cys Ala Lys; Lys Lys Lys Lys Pro Ser Leu His Thr  
 20 25 30  
 Leu Lys Pro Phe Leu Asn Pro; Ser Arg Glu Ser Thr Val Ala Ser Ser  
 35 40 45  
 Thr Thr Ala Ile Gly Phe Ala; Ser Val Met Cys Ser Tyr Leu Leu Asp  
 50 55; 60  
 Phe Gln Asn Ile Lys Lys Lys; Lys Arg Ala Ala Ala Leu Glu Asp Pro  
 65 70 75 80

Ser Val Ile Ile Thr Thr Thr His Cys Ser Asp Gly Ser Ile Leu Ala  
 310 315 320  
 atc gcc ctg ctg atc ctg ttc ctg ctc cta gcc ctg gct ctc ctc tgg 1123  
 Ile Ala Leu Leu Ile Leu Phe Leu Leu Leu Ala Leu Ala Leu Leu Trp  
 325 330 335 340  
 tgg ttc tgg ccc ctc tgc tgc act gtg att atc aag gag gtc cct cca 1171  
 Trp Phe Trp Pro Leu Cys Cys Thr Val Ile Ile Lys Glu Val Pro Pro  
 345 350 355  
 ccc cct gcc gag gag agt gag gaa aat aaa ata aaa taacaagaag 1217  
 Pro Pro Ala Glu Glu Ser Glu Glu Asn Lys Ile Lys  
 360 365  
 aagaaagaaa gaaatccac agaaacagat aacctaacac agcccgtagc acgtatttta 1277  
 tacaatgctc tgaaaatcat agtctcaatc tagacagtct ttctctctag ttccctgtat 1337  
 tcaaattcca gtgtctaaca ttcaataaat agctatatga aatcaaaaaa aaaaaaaaaa 1397  
 aaaaaaaaaa aaaaaaaa 1414

<210> 2  
 <211> 368  
 <212> PRT  
 <213> Homo sapiens

<400> 2  
 Met Ala Thr Ala Glu Arg Arg Ala Leu Gly Ile Gly Phe Gln Trp Leu  
 1 5 10 15  
 Ser Leu Ala Thr Leu Val Leu Ile Cys Ala Gly Gln Gly Gly Arg Arg  
 20 25 30  
 Glu Asp Gly Gly Pro Ala Cys Tyr Gly Gly Phe Asp Leu Tyr Phe Ile  
 35 40 45  
 Leu Asp Lys Ser Gly Ser Val Leu His His Trp Asn Glu Ile Tyr Tyr  
 50 55 60  
 Phe Val Glu Gln Leu Ala His Lys Phe Ile Ser Pro Gln Leu Arg Met  
 65 70 75 80  
 Ser Phe Ile Val Phe Ser Thr Arg Gly Thr Thr Leu Met Lys Leu Thr  
 85 90 95  
 Glu Asp Arg Glu Gln Ile Arg Gln Gly Leu Glu Glu Leu Gln Lys Val  
 100 105 110  
 Leu Pro Gly Gly Asp Thr Tyr Met His Glu Gly Phe Glu Arg Ala Ser  
 115 120 125  
 Glu Gln Ile Tyr Tyr Glu Asn Arg Gln Gly Tyr Arg Thr Ala Ser Val  
 130 135 140

Ile	Ile	Ala	Leu	Thr	Asp	Gly	Glu	Leu	His	Glu	Asp	Leu	Phe	Phe	Tyr	145	150	155	160
Ser	Glu	Arg	Glu	Ala	Asn	Arg	Ser	Arg	Asp	Leu	Gly	Ala	Ile	Val	Tyr	165	170	175	
Cys	Val	Gly	Val	Lys	Asp	Phe	Asn	Glu	Thr	Gln	Leu	Ala	Arg	Ile	Ala	180	185	190	
Asp	Ser	Lys	Asp	His	Val	Phe	Pro	Val	Asn	Asp	Gly	Phe	Gln	Ala	Leu	195	200	205	
Gln	Gly	Ile	Ile	His	Ser	Ile	Leu	Lys	Lys	Ser	Cys	Ile	Glu	Ile	Leu	210	215	220	
Ala	Ala	Glu	Pro	Ser	Thr	Ile	Cys	Ala	Gly	Glu	Ser	Phe	Gln	Val	Val	225	230	235	240
Val	Arg	Gly	Asn	Gly	Phe	Arg	His	Ala	Arg	Asn	Val	Asp	Arg	Val	Leu	245	250	255	
Cys	Ser	Phe	Lys	Ile	Asn	Asp	Ser	Val	Thr	Leu	Asn	Glu	Lys	Pro	Phe	260	265	270	
Ser	Val	Glu	Asp	Thr	Tyr	Leu	Leu	Cys	Pro	Ala	Pro	Ile	Leu	Lys	Glu	275	280	285	
Val	Gly	Met	Lys	Ala	Ala	Leu	Gln	Val	Ser	Met	Asn	Asp	Gly	Leu	Ser	290	295	300	
Phe	Ile	Ser	Ser	Ser	Val	Ile	Ile	Thr	Thr	Thr	His	Cys	Ser	Asp	Gly	305	310	315	320
Ser	Ile	Leu	Ala	Ile	Ala	Leu	Leu	Ile	Leu	Phe	Leu	Leu	Leu	Ala	Leu	325	330	335	
Ala	Leu	Leu	Trp	Trp	Phe	Trp	Pro	Leu	Cys	Cys	Thr	Val	Ile	Ile	Lys	340	345	350	
Glu	Val	Pro	Pro	Pro	Pro	Ala	Glu	Glu	Ser	Glu	Glu	Asn	Lys	Ile	Lys	355	360	365	

<210> 3

<211> 180

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: von Willebrand factor A domain consensus sequence

<400> 3

Pro	Leu	Asp	Val	Val	Phe	Leu	Leu	Asp	Gly	Ser	Gly	Ser	Met	Gly	Gly	1	5	10	15
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